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COASY Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a full length recombinant COASY.
Catalog # AT1576a

Product Information

Application	WB, E
Primary Accession	Q13057
Other Accession	BC006354
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG1 kappa
Clone Names	1H6
Calculated MW	62329

Additional Information

Gene ID	80347
Other Names	Bifunctional coenzyme A synthase, CoA synthase, NBP, POV-2, Phosphopantetheine adenylyltransferase, Dephospho-CoA pyrophosphorylase, Pantetheine-phosphate adenylyltransferase, PPAT, Dephospho-CoA kinase, DPCK, Dephosphocoenzyme A kinase, DPCOAK, COASY
Target/Specificity	COASY (AAH06354, 1 a.a. ~ 225 a.a) full-length recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000 E~~N/A
Format	Clear, colorless solution in phosphate buffered saline, pH 7.2 .
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
Precautions	COASY Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

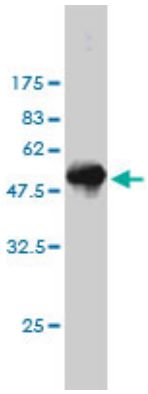
Background

Biosynthesis of coenzyme A (CoA) from pantothenic acid (vitamin B5) is an essential universal pathway in prokaryotes and eukaryotes. COASY is a bifunctional enzyme that catalyzes the 2 last steps in CoA synthesis. These activities are performed by 2 separate enzymes, phosphopantetheine adenylyltransferase (PPAT; EC 2.7.7.3) and dephospho-CoA kinase (DPCK; EC 2.7.1.24), in prokaryotes (Daugherty et al., 2002 [PubMed 11923312]).

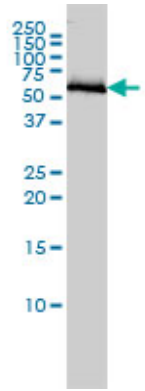
References

Genetic susceptibility to distinct bladder cancer subphenotypes. Guey LT, et al. Eur Urol, 2010 Feb. PMID 19692168.CoA synthase is in complex with p85alphaPI3K and affects PI3K signaling pathway. Breus O, et al. Biochem Biophys Res Commun, 2009 Aug 7. PMID 19482007.Possible difference in frequencies of genetic polymorphisms of estrogen receptor alpha, estrogen metabolism and P53 genes between estrogen receptor-positive and -negative breast cancers. Hamaguchi M, et al. Jpn J Clin Oncol, 2008 Nov. PMID 18820009.Identification of a novel CoA synthase isoform, which is primarily expressed in the brain. Nemazanyy I, et al. Biochem Biophys Res Commun, 2006 Mar 24. PMID 16460672.Diversification of transcriptional modulation: large-scale identification and characterization of putative alternative promoters of human genes. Kimura K, et al. Genome Res, 2006 Jan. PMID 16344560.

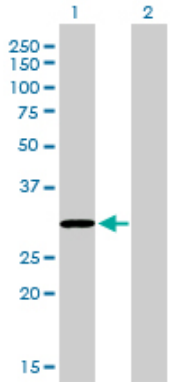
Images



Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (50.49 KDa) .



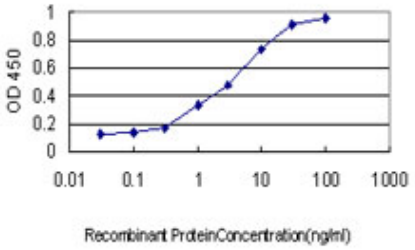
COASY monoclonal antibody (M01), clone 1H6 Western Blot analysis of COASY expression in A-431 ((Cat # AT1576a)

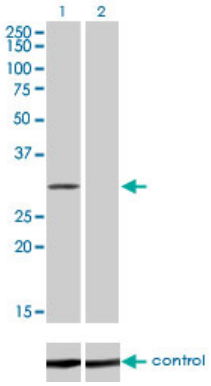


Western Blot analysis of COASY expression in transfected 293T cell line by COASY monoclonal antibody (M01), clone 1H6.

Lane 1: COASY transfected lysate(30.2 KDa).
Lane 2: Non-transfected lysate.

Detection limit for recombinant GST tagged COASY is approximately 0.1ng/ml as a capture antibody.





Western blot analysis of COASY over-expressed 293 cell line, cotransfected with COASY Validated Chimera RNAi ((Cat # AT1576a)

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.